IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application: Chopp, et al. Confirmation No.: 9739

Serial No.: 10/075,715 Group Art Unit: 1614

Filed: 02/13/2002 Examiner: GEMBEH, Shirley V.

For: NITRIC OXIDE DONORS FOR INDUCING NEUROGENESIS

Attorney Docket No.: 1059.00073

DECLARATION

I, Dr. Michael Chopp, being duly sworn, do hereby state that:

1. I am a co-inventor of the above-captioned application.

2. I am skilled in the art and have worked extensively in the field of nitric oxide donors and neurogenesis.

3. Claims 1, 6-8, and 14-17 stand rejected under 35 U.S.C. § 102(b), as being anticipated by Endres, et al. The Office Action holds that the mechanistic functions affecting new neuron growth, increasing levels of cGMP, augmenting, and increasing neurological function will inherently occur once the drug is administered. This statement is repeated throughout the rejections in the Office Action.

Endres, et al. only teaches administration before ischemia to protect against damage and does not disclose any new neuronal growth. See Results, emphasis added: "To determine whether statin administration confers protection against ischemic stroke, 129 /SV wild-type mice were s.c.-injected daily for 14 days with an HMG-CoA reductase inhibitor Sim (0.2, 2.0 and 20 mg/kg) ***before MCA occlusion***." In other words, the compounds in Endres, et al. are only used prophylactically.

In contradistinction, the present invention requires administration post ischemic event, i.e. after stroke has already occurred. The method of the present invention is not a prophylactic method, but rather one that is a treatment for conditions that have already occurred. Thus, Endres, et al. does not perform a critical step in the administration of the compounds of the present invention.

Furthermore, Endres, et al. does not disclose any new neuron growth, i.e. the growth of ***new neurons*** through neurogenesis, as required by the independent claims and ***new neuron growth does not inherently occur just because a similar***

compound is administered. Endres, et al. merely teach that HMG-CoA reductase inhibitors provide their benefit by increasing blood flow and reducing brain injury during cerebral ischemia. Increasing blood flow and reducing brain injury are irrelevant to the mechanism of the present invention. As we have shown on multiple occasions, improvement of outcome and neurogenesis are independent of blood flow and lesion volume. We demonstrate over again that neurogenesis and improvement of function occur when there is no change in brain injury and no change in blood flow. So, ***it is quite possible to see different mechanistic effects can result with similar compounds and therefore these mechanisms are not necessarily inherent to the compounds***. The work of Endres et al. implies therapeutic benefit only results from a reduction of lesion volume, which is counter to the findings of the present invention, and incorrect. One cannot in any way extrapolate from Endres, et al. that neurogenesis occurs and therapeutic benefit is present when HMG-CoA reductase inhibitors are administered post stroke.

Therefore, since Endres, et al. does not disclose administration the compounds of the present invention post ischemic event or new neuron growth as set forth in the presently pending independent claims, the claims are patentable over Endres, et al. and reconsideration of the rejection is respectfully requested.

The undersigned declares further all statements made herein of his knowledge are true and that all statements made upon information and belief are believed to be true, and further that the statements were made with the knowledge that willful and false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 2/2/09

Dr. Michael Chopp